REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the subject application. The non-Final Office Action of July 30, 2002 has been received and contents carefully reviewed.

Claims 1-28 are currently pending. Claims 1, 12, 23, and 24 are amended.

In the Office Action, the Examiner objected to the drawings under 37 CFR 1.83(a) because the recited features in claims 1, 12, 23, and 24, "wherein $d\Delta n$ is in the range of 0.29 – 0.36 μm..." and "wherein a variation of light transmittance according to $d\Delta n$ is less than about 60%" must be shown or canceled from the claims. Applicant respectfully traverses this objection.

At least Figure 2 of this application shows a graph variation of light transmittance on the vertical axis according to a variation of retardation on the horizontal axis. The variation of light transmittance ranges from about 0 to about 80% in the figure. The variation of retardation ranges from about 0 to about 0.40. Applicant respectfully submits that the claimed features (as previously amended) "$d\Delta n$ is in the range of 0.29 – 0.36 μm" and "a variation of light transmittance according to $d\Delta n$ is at least about 60%" is shown in at least Figure 2. Applicant requests that the objection be withdrawn.

The Examiner objected to the specification as failing to provide proper antecedent basis for the recitation "wherein a variation of light transmittance according to $d\Delta n$ is less than about 60%". The Examiner rejected claims 1-28 under 35 USC § 112, first paragraph, as containing subject matter which was not described in the specification, i.e., failing to provide support for "wherein a variation of light transmittance according to $d\Delta n$ is less than about 60%". Applicant respectfully traverses this objection and rejection.

Applicant has amended claims 1, 12, 23, and 24 by changing "is less than about" to --at least about--. Applicant respectfully submits that all of the claims comply with 35 USC § 112 and request that the rejection be withdrawn.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned **"Version with markings to show changes made."**

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully

requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

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Respectfully submitted,

By _____

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Version With Markings to Show Changes Made

Please amend the claims as follows (A marked up version of the amended claims is attached):

1. (Amended) An in-plane switching mode liquid crystal display device comprising:

first and second substrates;

a plurality of gate and data bus lines defining pixel regions and arranged on the first substrate;

a common line in the pixel region, the common line and the data bus lines having a crossing relationship;

a pair of first and second electrodes parallel to each other applying plane electric fields in t he pixel regions; and

a liquid crystal layer between the first and second substrates;

wherein $d\Delta n$ is in the range of 0.29-0.36μm, where d is the thickness of the liquid crystal layer, and Δn is the refractive anisotropy of the liquid crystal molecule; and

wherein a variation of light transmittance according to $d\Delta n$ is [less than] at least about 60%.

12. (Amended) A method of making an in-plane switching mode liquid crystal display device having first and second substrates, the method comprising the steps of:

forming a plurality of gate and data bus lines defining pixel regions and arranged on the first substrate;

forming a common line in the pixel region, the common line and the data bus lines having a crossing relationship;

forming a pair of first and second electrodes parallel to each other applying plane electric fields in the pixel regions; and

forming a liquid crystal layer between the first and second substrates;

wherein $d\Delta n$ is in the range of 0.29-0.36μm, where d is the thickness of the liquid crystal layer, and Δn is the refractive anisotropy of the liquid crystal molecule; and

wherein a variation of light transmittance according to $d\Delta n$ is [less than] at least about 60%.

23. (Amended) An in-plane switching mode liquid crystal display device comprising:

first and second substrates;

a plurality of gate and data bus lines defining pixel regions and arranged on said first substrate;

a common line in said pixel regions, the common line and the data bus lines having a crossing relationship;

a data electrode and a common electrode parallel to each other applying plane electric fields in said pixel regions;

a liquid crystal layer between said first and second substrates;

a plurality of thin film transistors adjacent respective cross points of said gate and data bus lines, each of said plurality of thin film transistors including a gate electrode, a gate insulator, a semiconductor layer, and source and drain electrodes;

a passivation layer on said plurality of thin film transistors;

a first alignment layer on said passivation layer, said first alignment layer comprising one of polyamide, polyimide, SiO_2, polyvinylalcohol, polyamic acid, and photosensitive material;

a black matrix for preventing light from leaking around said plurality of thin film transistors, said gate bus line, and said data bus line;

a color filter layer on said second substrate;

a second alignment layer on said color filter layer, said second alignment layer comprising one of polyamide, polyimide, SiO_2, polyvinylalcohol, polyamic acid, and photosensitive material, said photosensitive material being selected from the group consisting of polyvinylcinnamate, polysiloxanecinnamate and cellulosecinnamate; and

wherein $d\Delta n$ is in the range of 0.29-0.36μm, where d is the thickness of said liquid crystal layer, and Δn is the refractive anisotropy of the liquid crystal molecule; and

wherein a variation of light transmittance according to $d\Delta n$ is [less than] at least about 60%.

24. (Amended) A method of making an in-plane switching mode liquid crystal display device having first and second substrates, the method comprising:

forming a plurality of gate and data bus lines defining pixel regions and arranged on the first substrate;

forming a common line in the pixel regions, the common line and the data bus lines having a crossing relationship;

forming a data electrode and a common electrode parallel to each other applying plane electric fields in the pixel regions;

forming a liquid crystal layer between the first and second substrates;

forming a plurality of thin film transistors adjacent respective cross points of said gate and data bus lines, each of the plurality of thin film transistors including a gate electrode, a gate insulator, a semiconductor layer, and source and drain electrodes;

forming a passivation layer on said plurality of thin film transistors;

forming a first alignment layer on said passivation layer, said first alignment layer comprising one of polyamide, polyimide, SiO_2, polyvinylalcohol, polyamic acid, and photosensitive material;

forming a black matrix for preventing light from leaking around said plurality of thin film transistors, said gate bus line, and said data bus line;

forming a color filter layer on said second substrate;

forming a second alignment layer on said color filter layer, said second alignment layer comprising one of polyamide, polyimide, polyvinylalcohol, polyamic acid, and photosensitive material, said photosensitive material being selected from the group consisting of polyvinylcinnamate, polysiloxanecinnamate and cellulosecinnamate; and

wherein $d\Delta n$ is in the range of 0.29-0.36μm, where d is the thickness of said liquid crystal layer, and Δn is the refractive anisotropy of the liquid crystal molecule; and

wherein a variation of light transmittance according to $d\Delta n$ is [less than] <u>at least</u> about 60%.